Number of 1 Bits (View)

Write a function that takes an unsigned integer and returns the number of '1' bits it has (also known as the Hamming weight).

Note:

- Note that in some languages, such as Java, there is no unsigned integer type. In this case, the input will be given as a signed integer type. It should not affect your implementation, as the integer's internal binary representation is the same, whether it is signed or unsigned.
- In Java, the compiler represents the signed integers using 2's complement notation. Therefore, in **Example 3**, the input represents the signed integer. `-3`.

Example 1:

```
Input: n = 00000000000000000000000000001011

Output: 3

Explanation: The input binary string 00000000000000000000000000001011 has a total
of three '1' bits.
```

Example 2:

```
Input: n = 00000000000000000000000010000000

Output: 1

Explanation: The input binary string 00000000000000000000000010000000 has a total
of one '1' bit.
```

Example 3:

```
Input: n = 11111111111111111111111111111101

Output: 31

Explanation: The input binary string 11111111111111111111111111111101 has a total
of thirty one '1' bits.
```

Constraints:

- The input must be a **binary string** of length `32`.